iowa department of environmental quality

reply to: Steve Hoambrecker
phone: 319/653-2135

CERTIFIED MAIL

October 5, 1981

Virgil R. Showerman
Chamberlain Mfg. Corp.
Collis Division
2005 19th Street
Clinton, IA 52732

RE: Hazardous Waste Facility Inspection
Conducted by Merritt Van Lier

Dear Mr. Showerman:

Enclosed is a hazardous waste inspection report of your facility.

Mr. Van Lier has detailed various deficiencies regarding various aspects of your hazardous waste plan. In addition to Mr. Van Lier's recommendations, the following additional comments are made:

Information listed in your Part A is contrary to that included in a survey questionnaire submitted to our Department January 28, 1981. It is believed that information contained in the questionnaire is more representative of your facility's hazardous waste status. Please get in touch with Jim Humeston, 515/281-8884 to properly correct this information.

Concerning closure plans, you are advised that each hazardous waste facility must have a written closure plan identifying the steps necessary to completely close the facility at any point or at the end of its intended life. You are reminded that an owner or operator must submit his closure plan at least 180 days before expected beginning of closure. It is recommended that you refer to CFR 265.112 for closure plan specifics.

As illustrated in this inspection, as well as in past wastewater inspections, overall containment of storage areas is inadequate. Roll-off boxes whether considered storage tanks or containers need proper containment of potential spillage as do the electroplating sludge drums observed this inspection. It is felt that diked areas in containment areas should be established.

October 5, 1981

Virgil R. Showerman
Chamberlain Mfg. Co.
Collis Division

We are hereby requiring your facility to submit by November 15, 1981 a complete hazardous waste plan for your facility, updating your plan to satisfactorily address inadequacies sited in this report.

It should be noted that this inspection is subject to further review and comment from our hazardous waste section in Des Moines. Should you have any questions, feel free to contact the Region 6 office.

Sincerely,

COMPLIANCE DIVISION

for Earl C. Voelker, Sr.
Regional Administrator
Regional Office No. 6

SH:w

xc: Jim Humeston, DEQ Hazardous Waste

IOWA DEPARTMENT OF ENVIRONMENTAL QUALITY
Report Of Investigation

INVESTIGATION DATE

Current 8/31/81 | Last

TO: (Facility Name, Location & Address)

Chamberlain Manufacturing Corp.
Collis Company Division
2005 South 19th St.
P. O. Box 231
Clinton, IA 52732

RE: (Specify Investigation Purpose Or Cite Rule)

HAZARDOUS WASTE INSPECTION

FROM: (Use Stamp)

Region No. 6
P. O. Box 27
Washington, Iowa 52353

Persons Contacted (Name & Position)

Nello Arterburn, Plating Superintendent

SEP 15 7 56 AM '81

Ron Streets, Lab Technician

ENVIRONMENTAL QUALITY

OBSERVATIONS/RECOMMENDATIONS

On August 31, 1981, a RCRA inspection was conducted at the Collis Company in Clinton, Iowa.

Collis is engaged in the manufacture and plating of interior refrigerator components (metal racks). Racks are fabricated, cleaned through a series of alkaline/acid baths, plated in a zinc cyanide solution, dipped in a chromate solution, rinsed, lacquer coated, oven dried, inspected, and packaged for shipping.

Process wastewater is treated at the plant by segregating chrome wastes and reducing them from the hexavalent to trivalent state using sulfur dioxide in an acidic environment. Segregated cyanide wastes receive two stage alkaline chlorination. Pretreated chrome and cyanide wastes are then combined with other acid-alkaline waste streams in a neutralization tank, where the pH is adjusted to 8.5, then discharged to a settling basin where trivalent chrome and zinc are precipitated. A polymer is added to the settling basin influent to enhance settling. Treated wastewater is pumped to a diatomaceous earth filter, then discharged into a tributary of Mill Creek. Sludge generated by the wastewater plant is dewatered by pressure filtration, then placed in a hopper which is periodically emptied into a larger roll off box, then transported to an Illinois landfill. Approximately 12 yd^3 - 15 yd^3 of sludge is removed in this manner every 3 days. Sludge is contaminated with zinc, chromium, and cyanide wastes, by products of the plating process.

In the past, approximately 1000 yd^3 of sludge was stored in one of 6 lagoon cells located adjacent to wastewater treatment plant facilities. Cells are being dredged at the current time. Two will be left open for future emergency storage should landfill arrangements be terminated.

Sludge from plating tanks is temporarily stored in 55 gallon drums on site prior to treatment.

Past wastewater inspections conducted by this office have revealed a number of major deficiencies in plant operation and maintenance at the Collis Company, which are also

SUSPENSE DATE	Signature	Date
1 1	Inspector: Merritt Van Lier — Merritt Van Lier	9/4/81
	Regional Administrator: Earl C. Voelker, S. — Earl C. Voelker	9/14/81

Enclosures (Specify)

Distribution: Regional Office: Central Office: Inspected Facility

RP-5 (8-79)

IOWA DEPARTMENT OF ENVIRONMENTAL QUALITY

SANITARY LANDFILL INSPECTION ☐

WATER SUPPLY INSPECTION ☐

WASTEWATER TREATMENT FACILITY INSPECTION ☐

AIR QUALITY INSPECTION ☐

HAZARDOUS WASTE INSPECTION [x]

Facility/Permit #

IAD 0 4 7 3 0 3 7 7 1

ITEM CODE	COMMENTS AND RECOMMENDATIONS

reflected in this report. Deficiencies have included overflow of lagoon cells and settling basin, leakage and spills from bulk storage tanks, contaminated storm runoff, poor housekeeping in drum storage areas, and contamination of the receiving stream. A number of improvements have been made, however, most notably: the installation of concrete walls around bulk storage tanks and planned removal of lagoon cell contents. Collis is also preparing an SPCC plan, portions of which will be utilized in the RCRA contingency plan.

Major facilities inspected during this RCRA inspection included the wastewater plant, lagoon cells, drum storage areas, bulk storage tanks, and other associated facilities. Compliance with RCRA requirements were discussed with plant officials as detailed in the following report.

1. MANIFESTS

Recent waste manifests (2) were reviewed with Collis personnel. Copies were made and placed in DEQ file.

Plating sludge is currently shipped to the Davis Junction/BFI hazardous waste disposal site in Rockford, Illinois. Jetters Hauling Service is providing transportation.

2. SHORT TERM STORAGE

Plating wastes are normally shipped out within 3 days of generation. Hence, Collis qualifies for "short term storage status" (i.e. less than 90 days), as defined by RCRA, although sludge from past operations has been stored for a number of years in lagoon cells located on site. These are being dredged but will not be "closed" as described below.

2.A. PERSONNEL TRAINING - Position Descriptions & Training Records

Job descriptions for "Water Treatment Operator Leadman" and "Water Treatment Operator" were reviewed with Collis personnel. Both these positions would involve some contact with plating waste materials.

It was suggested that more information on types of wastes treated, health effects, etc. be included in job descriptions. Also, Collis needs to

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SANITARY LANDFILL INSPECTION ☐

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AIR QUALITY INSPECTION ☐

HAZARDOUS WASTE INSPECTION [x]

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ITEM CODE	COMMENTS AND RECOMMENDATIONS
	institute classroom or on the job training program to cover various facets of hazardous waste management. Such items as contingency plans and emergency response procedures should be reviewed with plant personnel. RCRA required that initial training for current employees be completed before May 1981, while training for new employees must be accomplished within 6 months of the date of hire. Training should be documented so that records may be reviewed during the next scheduled RCRA inspection by this office.
2.B.	PREPAREDNESS and PREVENTION PRODEDURES Telephone(s) should be installed in the storage yard area in case of emergency. Only phones now available are in main plant and in wastewater treatment area. Settling Basin Lab Plant appears to have adequate fire fighting equipment. Representative from Clinton Fire Department visited plant last fall. Reportedly has been informed of plant layout, hazardous materials present, etc.
2.C.	EMERGENCY PROCEDURES At the request of DEQ regional office, Collis is in process of preparing a spill prevention, control and countermeasure plan (SPCC) which is similar to required contingency plan under RCRA. DEQ R6 has already reviewed and commented on preliminary material submitted. Formalized RCRA contingency plan, however, should be available for next inspection. Emphasis should be placed on names and actions of key people in case of fire, explosion, or release of hazardous wastes. Collis should refer to CFR 265.52 for complete requirements.
3.A.	RECORD KEEPING and ANNUAL REPORT Collis officials were aware of 3 yr retention requirement for all hazardous waste manifests and were also reminded of annual reporting requirements.
4.	CONTAINERS A number of electroplating sludge drums in temporary storage near the receiving dock, east of the plant were found uncovered during the inspection.

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SANITARY LANDFILL INSPECTION ☐

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AIR QUALITY INSPECTION ☐

HAZARDOUS WASTE INSPECTION [x]

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4. Cont.	Recent rains had caused the drums to fill up and overflow. Also, there was evidence of oil seepage and spills from drums stored on the east side of the plant adjacent to the stock room. Ignitable lacquer solvents were in proper storage, >15 m from property boundary. Much better housekeeping is required at Collis. All drums should be fitted with covers and rings until the sludge is treated in the wastewater plant. Oil in leaking drums should be transferred to new containers. Plant officials should consult CFR 262.31, 32,34 for appropriate labeling requirements. Poor housekeeping at Collis has been cited in previous wastewater inspection reports filed by the DEQ R6 office.
5.	TANKS Storage tanks at Collis are generally in excellent condition. At the request of DEQ R6, concrete walls have been installed around chromate, zinc, muriatic, and nitric acid tanks, a significant improvement in spill control. Spent acid is stored in one of two 7,000 gal. uncovered tanks located north and directly behind the plant. Greater than 60 cm freeboard is always maintained in this tank. A dike has also been installed to contain spills. Inspections of both tanks and drums should be conducted at least weekly and documented in reports kept on file. Reports will be requested during next RCRA inspection. WASTE ANALYSES Sludge samples were collected from the storage lagoons, hopper, and filter press, composited and tested by Collis. Results are expressed in May 26, 1981 correspondence to Browning Ferris, Inc. (copy attached). The U. S. EPA also reportedly collected and tested sludge samples. Under Illinois requirements, Collis must retest sludge every 6 months to qualify for landfill permit renewal. SECURITY The Collis Company, including plant, wastewater treatment and lagoon facilities is surrounded by a cyclone fence, which provides adequate security.

IOWA DEPARTMENT OF ENVIRONMENTAL QUALITY

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AIR QUALITY INSPECTION ☐

HAZARDOUS WASTE INSPECTION [x]

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ITEM CODE	COMMENTS AND RECOMMENDATIONS
5. Cont.	Signs bearing the legend, "Danger - Unauthorized Personnel Keep Out" or equivalent should be posted at each gate, however. "Par Mar" Security systems provides electronic surveillance of plant grounds. High and low level warning indicators have also been placed on storage tanks. INSPECTIONS As noted above, all containment structures including drums, tanks, lagoon cells, etc. should be inspected at least weekly by designated Collis employer. Leaking or improperly covered containers should be reported, as well as condition of tanks, freeboard in lagoons, condition of dikes, etc. Checklists should be developed to facilitate required documentation for RCRA. GROUNDWATER MONITORING Collis plans to install 2 downflow and 3 upgradient wells around existing lagoon facilities. Wells must be installed prior to November 19, 1981. Also unless otherwise indicated, RCRA requires at least 3 downgradient monitoring wells. Wells will reportedly be 15' deep. Details of groundwater monitoring program, including well placement and construction, sample collection, analysis plan, etc. should be submitted to DEQ when information becomes available.
10.	CLOSURE Collis is currently removing an estimated 1000 yd^3 of sludge stored in 6 lagoon cells for landfill disposal. Sludge is being trucked to the Davis Junction/BFI landfill located in Rockford, Illinois. Rather than file closure plans, Collis has decided to maintain 2 empty cells for future emergency sludge storage. They will install monitoring wells as described above to comply with RCRA requirements.

Item 8 11/18/81 Since disposal had occured prior to 11/18/80 this facility could not be considered an interim status disposal facility. The RCRA requirements are not applicable. After Talking w/EPA it was decided EPA would Take The lead, via The uncontrolled site program, in determining The appropriate groundmonitoring program. Called Chamberlain and Gregson and explained The issue

8.

Taken from Doc #11, file #1

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HAZARDOUS WASTE INSPECTION [x]

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HAZARDOUS WASTE INSPECTION [x]

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ITEM CODE	COMMENTS AND RECOMMENDATIONS
15.	SURFACE IMPOUNDMENTS As noted above, wastewater treatment plant sludge from prior operations is stored in 4 small and 2 large lagoon cells located on site. To date, contents of one large cell have been removed and transported to Rockford, Illinois for disposal, while the other cells are in varying degrees of sludge removal. A dragline operation has been set up to facilitate sludge withdrawal, although it was not in operation during the inspection. Dredging operations have continued over the past year resulting in disruption of sludge impoundments with consequent drainage into a tributary of Mill Creek. Efforts have been made to contain runoff, although evidence of contamination has been noted in previous inspections. The plant manager was asked to expedite remaining operations to prevent additional runoff into the stream. A clay cap over cells which will not be used in the future was also recommended to reduce percolation. SUMMARY OF RECOMMENDATIONS 1. Expedite removal of remaining sludge from lagoon cells. 2. Improve housekeeping practices in drum storage areas. Fit all drums with lids, rings, etc. to prevent overflow. Inspect weekly. Check for leakers. Document inspections. 3. Inspect bulk storage tanks weekly. Document inspections. 4. Complete SPCC and RCRA contingency plans. 5. Install required monitoring wells. 6. Modify current job descriptions in accordance with RCRA requirements. Offer and document employee hazardous waste training. 7. Install telephone(s) in yard for emergency purposes. 8. Post warning signs at access gates.

Company Name Chamberlain Mfg. Co. Collis Division Date of Inspection 8/31/81 IAD 0473037711

HAZARDOUS WASTE GENERATOR General Administrative Requirements Site Inspection Report Checklist	INSTRUCTION Answer and Explain as Necessary

1. Manifest [40 CFR 262.21, 262.22 & 262.23 as incorporated in 400-45 (455B) I.A.C.]

[x] Adequate [ ] More Effort Required [ ] Inadequate [ ] Not Applicable

2. Short Term Storage (262.34)

[x] Applicable [ ] Not Applicable

A. Personnel Training (265.16)

(1) Position Descriptions (2) Training Records

[ ] Adequate [x] More Effort Required [ ] Inadequate

B. Preparedness and Prevention Procedures (265.30 & 265.31)

(1) Required Equipment (265.32) and (2) Testing and Maintenance of Equipment (265.33)

[x] Adequate [ ] More Effort Required [ ] Inadequate [ ] Not Applicable

(3) Access to Communications or Alarm Systems (265.34) and (4) Required Aisle Space (265.35)

[ ] Adequate [ ] More Effort Required [x] Inadequate [ ] Not Applicable

(5) Arrangements with Local Authorities (265.37)

[x] Adequate [ ] More Effort Required [ ] Inadequate [ ] Not Applicable

C. Emergency Procedures (265.56)

(1) Contingency Plan (265.52) and (2) Instruction on Contingency Plan

[ ] Adequate [x] More Effort Required [ ] Inadequate

3. Recordkeeping (262.40) and Annual Report (262.41)

[x] Adequate [ ] More Effort Required [ ] Inadequate [ ] Not Applicable

Company Name Chamberlain Mfg. Co. Collis Div., Clinton Date of Inspection 8/31/81 IAD 0 4 7 3 0 3 7 7 1

SHORT TERM STORAGE SITE INSPECTION REPORT CHECKLIST 4 (Containers)	INSTRUCTION Answer and Explain as Necessary
A. Condition of Container (265.171) ☐ Adequate ☐ More Effort Required ☒ Inadequate	
B. Inspections (265.174) ☐ Adequate ☐ More Effort Required ☒ Inadequate	
C. Special Requirements for Ignitable or Reactive Waste (265.176) ☒ Adequate ☐ More Effort Required ☐ Inadequate	
D. Labeling/Marking on Containers (262.31, 32, 34) ☐ Adequate ☒ More Effort Required ☐ Inadequate	

SHORT TERM STORAGE SITE INSPECTION REPORT CHECKLIST 5 (Tanks)	INSTRUCTION Answer and Explain as Necessary
A. Condition of Tanks (265.192) ☒ Adequate ☐ More Effort Required ☐ Inadequate	
B. Uncovered Tank Requirement (265.192) ☒ Adequate ☐ More Effort Required ☐ Inadequate ☐ Not Applicable	
C. Tank with Continuous Feed Requirement (265.192) ☐ Adequate ☐ More Effort Required ☐ Inadequate ☐ Not Applicable	
D. Inspections ☐ Adequate ☒ More Effort Required ☐ Inadequate	
E. Special Requirement for Ignitable or Reactive Waste ☐ Adequate ☐ More Effort Required ☐ Inadequate ☒ Not Applicable	

JV:mac/AQ18 - STSSIRC1

Chamberlain Mfg. Co.

Company Name Collis Div.,Clinton Date of Inspection 8/31/81 IAD 0 4 7 3 0 3 7 7 1

HAZARDOUS WASTE MANAGEMENT FACILITY General Administrative Requirements Site Inspection Report	Instruction Answer and Explain as Necessary
1. Waste Analysis (265.13) a. Waste Analysis Plan — Adequate [x] Inadequate [ ] b. Waste Analysis Results (operating record) — Adequate [x] Inadequate [ ]	
2. Security (265.14) [If applicable] a. Access Control — Adequate [x] Inadequate [ ] b. Warning Signs — Adequate [ ] Inadequate [x]	
3. Inspection (265.15) a. Inspection Schedule — Adequate [ ] Inadequate [x] b. Inspection Log (operating record) — Adequate [ ] Inadequate [x]	
4. Personnel Training (265.16) a. Position Descriptions — Adequate [ ] Inadequate [ ] b. Training Records — Adequate [ ] Inadequate [ ]	Evaluated on previous check list.
5. Preparedness and Prevention Plan (265.30) a. Maintenance and Operation of Facility (265.31) — Adequate [ ] Inadequate [ ] b. Required Equipment (265.32) — Adequate [ ] Inadequate [ ] c. Testing and Maintenance of Equipment (265.33) — Adequate [ ] Inadequate [ ] d. Access to Communications or Alarm Systems (265.34) — Adequate [ ] Inadequate [ ] e. Required Aisle Space (265.35) — Adequate [ ] Inadequate [ ] f. Arrangements with Local Authorities (265.37) — Adequate [ ] Inadequate [ ]	Evaluated on previous check list.
6. Emergency Procedures (265.56) a. Contingency Plan (265.52) — Adequate [ ] Inadequate [ ] b. Instruction on Contingency Plan (training records) — Adequate [ ] Inadequate [ ] c. Summary and Details of Implementation of Contingency Plan — Adequate [ ] Inadequate [ ]	Evaluated on previous check list.
7. Waste Accountability a. Manifests - HW Received & Shipped (276.71 & 262.23) — Adequate [ ] Inadequate [ ] b. Description & Location of HW within Facility (operating record) (265.73) — Adequate [ ] Inadequate [ ]	Evaluated on previous check list.

Chamberlain Mfg. Co. - Collis Div., Clinton

8. Groundwater Monitoring (Landfill, Land Treatment & Surface Impoundment)
   a. Groundwater Monitoring Program or Alternate Monitoring Program (265.90)
      Adequate [ ] Inadequate [x]
   b. Groundwater Sampling & Analysis Plan (265.92)
      Adequate [ ] Inadequate [x]
   c. Outline of Groundwater Quality Assessment Program (265.93)
      Adequate [ ] Inadequate [x]
   d. Groundwater Monitoring Results (265.94)
      Adequate [ ] Inadequate [x]
   e. (If Applicable) Documentation for Waiver of Groundwater Monitoring (265.90)
      Adequate [ ] Inadequate [ ]

9. Unsaturated Zone (Zone of Aeration) Monitoring Plan (Land Treatment Facility) (265.278)
   a. Plan
      Adequate [ ] Inadequate [ ]
   b. Monitoring Results
      Adequate [ ] Inadequate [ ]

10. Closure
   a. Closure Plan (265.112)
      Adequate [ ] Inadequate [ ]
   b. Closure Cost Estimate (265.142)
      Adequate [ ] Inadequate [ ]
   c. Financial assurrance for facility closure (265.143- by 7/13/81)
      Adequate [ ] Inadequate [ ]

See attached comments.

11. Post-Closure (Disposal Facility)
   a. Post-Closure Plan (265.118)
      Adequate [ ] Inadequate [ ]
   b. Post-Closure Cost Estimate (265.144)
      Adequate [ ] Inadequate [ ]
   c. Financial assurrance for post closure monitoring & maintenance (265.145-by 7/13/81)
      Adequate [ ] Inadequate [ ]

12. Liability Insurance (265.147 - by 7/13/81)
      Adequate [ ] Inadequate [ ]

mac/AQ2 - HWMF2

Chamberlain Mfg. Co.

Company Name Collis Div. Date of Inspection 8/31/81 IAD 0 4 7 3 0 3 7 7 1

15. SURFACE IMPOUNDMENTS SITE INSPECTION REPORT (See comments in report)	INSTRUCTION Answer and Explain as Necessary.
A. Freeboard (265.222) [x] Adequate [ ] Inadequate	
B. Containment System Protective Cover (265.223) [x] Adequate [ ] Inadequate	
C. Inspections (265.226) [x] Adequate [ ] Inadequate	
D. Security [x] Adequate [ ] Inadequate [ ] Not Applicable	
E. Required Equipment [x] Adequate [ ] Inadequate [ ] Not Applicable	
F. Groundwater Monitoring Wells (Condition) [ ] Adequate [x] Inadequate [ ] Not Applicable	To be installed prior to November 19, 1981
G. Containment System (Surface Impoundment Intended only for Storage or Treatment) [264.223] [ ] Complete [ ] Incomplete	See comments.